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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,150	10/08/2003	Roland Rick	030148	8217

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QUALCOMM INCORPORATED
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EXAMINER
KARIKARI, KWASI

ART UNIT	PAPER NUMBER
2617	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/23/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/23/2007.

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Office Action Summary	**Application No.** 10/682,150	**Applicant(s)** RICK ET AL.	
	Examiner Kwasi Karikari	**Art Unit** 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/22/2006 has been entered.

Response to Arguments

3. Applicant's arguments with respect to claims 1-39 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-4, 8-13,18,20,21,32-36, 38 and 39 are rejected under U.S.C. 102(e) as being anticipated by Moore (U.S 6,850,744), (hereinafter Moore).

Regarding **claims 1, 8, and 32,** Moore discloses a wireless device/method in a wireless communication system (see col. 3, lines 22-42 and Fig. 1) comprising:

a receiver unit operative to perform a full power scan on an entire list of radio frequency (RF) channels of interest (mobile station receives neighbor list and scan the neighbor list, see col. 4, lines 25-59; whereby the neighbor list which include ineligible and eligible control channels, is being associated with the "full power scan on the entire list") for cell selection to find a current serving cell from which to receive communication service (prior to performing any algorithm for selecting a primary candidate control channel, the mobile station receives the neighbor list from the control channel on which it is presently camped, see col. 2, lines 41-52; and col. 4., lines 25-32), to perform a partial power scan on a first list (eligible candidate control channel) of RF channels for cell reselection to switch from the current serving cell to a new serving cell (cell re-selection process, see col. 4, lines 44-66), and

to provide received signal strength measurements for the RF channels in the first list (each eligible control channel is for certain criteria such as RF levels, see col. 5, lines 1-3), wherein the first list includes RF channels on which to search for a suitable cell from which communication service may be received (see col. 1, lines 41-60), and

wherein the first list includes fewer than all RF channels in the entire list evaluated for cell selection (neighbor list includes ineligible and eligible control channel, see col. 4, lines 25-66; whereby the eligible control channel is being associated with the "first list" and neighbor list is being associated with the "entire list"); and

a controller (mobile station processor, see col. 4, lines 25-32) operative to obtain a second list (primary candidate) of at least one RF channel selected from among the RF channels in the first list (eligible control channel), to initiate processing of the at least one RF channel in the second list to find the suitable cell, and to select the suitable cell, if found, as the new serving cell from which to receive service (processor runs on each eligible control channels, select one or more candidate channels that meet certain criteria and go through the subset and select the optimal or primary control channel for camping, see col. 5, lines 1-41).

Regarding **claims 2 and 10,** as recited in claims 1 and 8, Moore discloses the device, wherein the controller is operative to identify a cell that is better than the current serving cell and to initiate cell reselection to the better cell, and wherein the partial power scan on the first list of RF channels and the processing of the at least one RF channel in the second list are performed only if the cell reselection to the better cell fails (reselection process, see col. 1, lines 41-60); and Fig. 3).

Regarding **claims 3 and 11,** as recited in claims 1 and 8, Moore discloses the device, wherein the controller is operative to determine that service can no longer be received from the current serving cell, to obtain a list of candidate cells from which service may be obtained, and to initiate cell reselection for the candidate cells, and wherein the partial power scan on the first list of RF channels and the processing of the at least one RF channel in the second list are performed only if the cell reselection to the candidate cells fails (mobile phone was in C2 and moving towards C1; and handoff from one base station to another, see col. 1, line 19-20).

Regarding **claims 4 and 13,** as recited in claims 1 and 8, Moore discloses the device, wherein the second list (primary control channels) includes N RF channels in the first list with strongest received signal strength measurements (optimal primary control channel), where N > 1, and wherein the N RF channels in the second list are processed in parallel to find the suitable cell (see col. 1, lines 41-60 and col. 5, lines 1-17).

Regarding **claim 9,** as recited in claim 8, Moore discloses the device, wherein the performing the partial power scan includes for each of the RF channels in the first list (eligible control channel), obtaining a sufficient number of received signal strength measurements for the RF channel, and computing an average of the received signal strength measurements for the RF channel (in the algorithm, the mobile station determines the control channels based on RF levels, see col. 1, lines 41-60 and col. 5, lines 1-17).

Regarding **claim 12,** as recited in claim 8, Moore discloses the device, wherein the second list includes all of the RF channels in the first list (eligible control channels include primary control channel, see col. 4, lines 44-66 and col. 5, lines 1-17).

Regarding **claim 18,** as recited in claim 8, Moore discloses the method, further comprising: if a suitable cell is not found, performing cell selection for all of the RF channels in the entire list to be evaluated for cell selection (analyzing neighbor list again for reselection, col. 5, line 65- col. 6, line 5).

Regarding **claims 20 and 21,** Moore discloses an apparatus in a wireless communication system (see col. 3, lines 22-42 and Fig. 1), comprising:

means for performing a full power scan on an entire list of radio frequency (RF) channels of interest (mobile station receives neighbor list and scan the neighbor list, see col. 4, lines 25-59; whereby the neighbor list which include ineligible and eligible control channels, is being associated with the "full power scan on the entire list") for cell selection to find a current serving cell from which to receive communication service means for obtaining a first list of RF channels (eligible candidate control channel) on which to search for a suitable cell for cell reselection to switch from the current serving cell to a new serving cell from which communication service may be received (prior to performing any algorithm for selecting a primary candidate control channel, the mobile station receives the neighbor list from the control channel on which it is presently camped, see col. 2, lines 41-52; and col. 4., lines 25-32),, wherein the first list includes fewer than all RF channels in the entire list evaluated for cell selection (neighbor list includes ineligible and eligible control channel, see col. 4, lines 25-66; whereby the eligible control channel is being associated with the "first list" and neighbor list is being associated with the "entire list");

means for performing a partial power scan on the first list of RF channels to obtain received signal strength measurements (each eligible control channel is for certain criteria such as RF levels, see col. 5, lines 1-3), for the RF channels in the first list (cell re-selection process, see col. 4, lines 44-66);

means for obtaining a second list of at least one RF channel selected from among the RF channels in the first list; means for processing (analyze) the at least one RF channel in the second list (primary candidate) to find the suitable cell; and

means for selecting the suitable cell, if found, as the new serving cell from which to receive service (processor runs on each eligible control channels, select one or more candidate channels that meet certain criteria and go through the subset and select the optimal or primary control channel for camping, see col. 5, lines 1-41).

Regarding **claim 33,** as recited in claim 32, Moore discloses the method, wherein the performing first cell reselection comprises attempting acquisition on a list of cells identified to be better than the current serving cell based on received signal strength measurements (handoff process, see col. 1, lines 19-60).

Regarding **claim 34,** as recited in claim 32, Moore discloses the method, wherein the performing first cell reselection comprises attempting acquisition on a list of cells for which received signal strength measurements are available (RF level and re-selection attempts, see col. 1, line 40- col. 2, line 5).

Regarding **claim 35,** as recited in claim 32, Moore discloses the method, further comprising: if the second cell reselection fails, performing second cell selection with the first list of RF channels, the second cell selection performing a third power scan on the first list of RF channels (RF level, re-selection analysis and attempts , see col. 1, line 40- col. 2, line 5).

Regarding **claim 36,** as recited in claim 1, Moore discloses the method, wherein the first list includes RF channels selected from a list of RF channels broadcast by the current serving cell (mobile station receives neighbor list from where the mobile station presently camped; and neighbor list includes eligible control channel, see col. 4, lines 25-66).

Regarding **claim 38,** as recited in claim 1, Moore discloses the method, wherein the first list excludes an RF channel of the current serving cell (eligible control channel and primary control channels, see col. 5, lines 1-17).

Regarding **claim 39,** as recited in claim 1, Moore discloses the method, wherein the receiver unit is operative to perform a full power scan on the entire list of RF channels for cell reselection if a suitable cell if not found from the partial power scan for cell reselection (see col. 1, line 61- col. 2, line 5).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 19 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Otting et al., (U.S. 6,771,960), (hereinafter Otting).

Regarding **claims 7 and 19**, as recited in claims 1 and 8, Moore fails to teach, wherein the wireless communication system is a Global System for Mobile Communications (GSM) system.

Otting teaches, wherein the wireless communication system is a Global System for Mobile Communications (GSM) system (see col. 3, lines 48-51).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching's of Otting with Moore for the benefit of achieving the a communication system that predefined available suitable cells in advance to save time and resources and also to eliminating the need to search for suitable cells while a mobile unit is in the process of changing cells (see col. 3, lines 9-25 and col. 4, lines 57-62).

Regarding **claim 37**, as recited in claim 1, Moore fails to teach, wherein the wireless. wherein the first list includes a predetermined number of strongest RF channels in a list of RF channels broadcast by the current serving cell.

However, Otting teaches, wherein the wireless, wherein the first list includes a predetermined number of strongest RF channels in a list of RF channels broadcast by the current serving cell (list of six strongest carriers, see col. 3, line 62- col. 4, line 18).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching's of Otting with Moore for the benefit of achieving the a communication system that predefined available suitable cells in advance to save time and resources and also to eliminating the need to search for suitable cells while a mobile unit is in the process of changing cells (see col. 3, lines 9-25 and col. 4, lines 57-62).

6. **Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of DAM et al, (U.S Pub. No. 20010016504), (hereinafter DAM).**

Regarding **claim 14**, as recited in claim 13, Moore fails specifically to teach the parallel process.

However, DAM teaches a technique for performing decoding and scanning in parallel at call set-up; and similar techniques can be applied at handoff (see Par. 0051).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching's of DAM with the system of Moore for the benefit of achieving a system with flexibly designed transceiver that render operations functions, at base station, more efficient.

7. **Claims 22-28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Otting and further in view of DAM et al, (U.S Pub. No. 20010016504), (hereinafter DAM).**

Regarding **claim 22, 23 and 31**; Moore discloses a wireless device in a system (see col. 3, lines 22-42 and Fig. 1), comprising:

a receiver unit operative to perform a full power scan on an entire list of radio frequency (RF) channels of interest (mobile station receives neighbor list and scan the neighbor list, see col. 4, lines 25-59; whereby the neighbor list which include ineligible and eligible control channels, is being associated with the "full power scan on the entire list") for cell selection to find a current serving cell from which to receive communication service, to perform a partial power scan on a first list of RF channels (eligible candidate control channel) for cell reselection to switch from the current serving cell to a new serving cell (cell re-selection process, see col. 4, lines 44-66), and to obtain received signal strength measurements for the RF channels in the first list, wherein the first list includes RF channels on which to search for a suitable cell from which communication service may be received, and wherein the first list includes fewer than all RF channels in the entire list evaluated for cell selection (neighbor list includes ineligible and eligible control channel, see col. 4, lines 25-66; whereby the eligible control channel is being associated with the "first list" and neighbor list is being associated with the "entire list");; and

a controller (mobile station processor, see col. 4, lines 25-32) operative to obtain a second list of N RF channels corresponding to N RF channels in the first list with strongest received signal strength measurements, where N > 1, to initiate processing of N RF channels in the second list to find the suitable cell, and to select the suitable cell, if found, as a-the new serving cell from which to receive service (processor runs on each eligible control channels, select one or more candidate channels that meet certain criteria and go through the subset and select the optimal or primary control channel for camping, see col. 5, lines 1-41); but fails to teach GSM system and parallel decoding process.

However, Otting teaches a Global System for Mobile Communications (GSM) system (see col. 3, lines 48-51).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching's of Otting with Moore for the benefit of achieving the a communication system that predefined available suitable cells in advance to save time and resources and also to eliminating the need to search for suitable cells while a mobile unit is in the process of changing cells (see col. 3, lines 9-25 and col. 4, lines 57-62).

The combination of Moore and Otting fails to teach a parallel decoding process.

However, DAM teaches a technique for performing decoding and scanning in parallel at call set-up; and similar techniques can be applied at handoff (see Par. 0051).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching's of DAM with the system of Moore for the benefit of achieving a system with flexibly designed transceiver that render operations functions, at base station, more efficient.

Regarding **claim 24** as recited in claim 23, Moore further discloses the method, further comprising: identifying a cell better than the current serving cell based on the received signal strength measurements; performing cell reselection to the better cell; and performing the obtaining a first list, performing a partial power scan, obtaining a second list, performing parallel decoding, and selecting the suitable cell if the cell reselection to the better cell fails (RF levels and reselection process, see col. 1, lines 41-60); and Fig. 3).

Regarding **claim 25,** as recited in claim 24, Moore and DAM fail to teach a BCCH allocation (BA) list for the current serving cell.

However, Otting teaches teach a BCCH allocation (BA) list for the current serving cell (see col. 3, line 48-61).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching's of Otting with Moore and DAM for the benefit of achieving the a communication system that predefined available suitable cells in advance to save time and resources and also to eliminating the need to search for suitable cells while a mobile unit is in the process of changing cells (see col. 3, lines 9-25 and col. 4, lines 57-62).

Regarding **claim 26**, as recited in claim 23, Moore and DAM fails specifically to teach a BCCH allocation (BA) list for the current serving cell; and performing parallel decoding.

However, Otting teaches teach a BCCH allocation (BA) list for the current serving cell (see col. 3, line 48-61).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching's of Otting with Moore and DAM for the benefit of achieving the a communication system that predefined available suitable cells in advance to save time and resources and also to eliminating the need to search for suitable cells while a mobile unit is in the process of changing cells (see col. 3, lines 9-25 and col. 4, lines 57-62).

The combination of Moore and Otting fails to teach parallel decoding process.

However, DAM teaches a technique for performing decoding and scanning in parallel at call set-up; and similar techniques can be applied at handoff (see Par. 0051).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching's of DAM with the system of Moore for the benefit of achieving a system with flexibly designed transceiver that render operations functions, at base station, more efficient.

Regarding **claim 27**, as recited in claim 26, the combination of Moore and DAM fails specifically to teach the BA list for the current serving cell.

However, Otting teaches BA list for the current serving cell (see col. 3, line 48-61).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching's of Otting with Moore and DAM for the benefit of achieving the a communication system that predefined available suitable cells in advance to save time and resources and also to eliminating the need to search for suitable cells while a mobile unit is in the process of changing cells (see col. 3, lines 9-25 and col. 4, lines 57-62).

Regarding **claim 28,** as recited in claim 27, Moore further discloses the method, wherein the first list excludes RF channels for the current serving cell (eligible control channel and primary control channels, see col. 5, lines 1-17).

Allowable Subject Matter

8. Claim 5, 6, 15,16,17,29 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is 571-272-8566. The examiner can normally be reached on M-F (8 am - 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8566. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kwasi Karikari
Patent Examiner.
03/13/2007.

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER